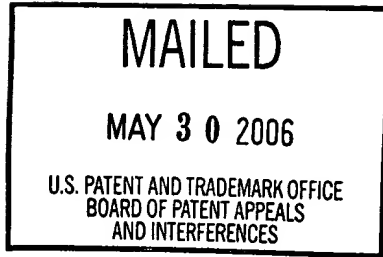


The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES



Ex parte DANIEL RICHARD

Appeal No. 2006-1063  
Application No. 09/787,952

HEARD: MAY 9, 2006

Before CRAWFORD, LEVY, and NAPPI, Administrative Patent Judges.  
LEVY, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1-3, 6-8 and 11, which are all of the claims pending in this application.

We REVERSE.

BACKGROUND

The appellant's invention relates to a system for starting an internal combustion engine and charging an electrical circuit (specification, page 1).

Claim 1 is representative of the invention, and is reproduced as follows:

1. System for a motor vehicle, able, on one hand, to start up an internal-combustion engine and, on the other hand, to charge an electrical circuit, including a main electrical machine able to operate, on the one hand, as a generator and, on the other hand, as an electric motor, said electrical machine driving the internal-combustion engine by means of a belt when said main electrical machine is operating in motor mode, the system further comprises a management means which drive the main electrical machine, further comprising a supplementary starter, as well as means for detecting at least one condition for triggering activation of said supplementary starter, and the management means drive the main electrical machine and the starter, according to a particular sequence, when said condition is detected by said detection means, wherein the management means include means for actuating the supplementary starter, when a condition for activating the supplementary starter is detected, in such a way that its pinion meshes on a complementary ring in order to drive the internal combustion engine, in order to drive the main electrical machine in a motor mode, when the pinion of the starter has been meshed and in order to cut off the starter and drive the main electrical machine in generator mode when it is detected that the internal-combustion engine has started and the management means include means for cutting off the operation of the main electrical machine in motor mode, when a condition for activation of the supplementary starter is detected.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Dyches et al. (Dyches)	5,601,058	Feb. 11, 1997
Bolenz et al. (Bolenz)	6,032,632	Mar. 7, 2000

Claims 1, 2, 6 and 7 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Bolenz.

Claims 3, 8 and 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bolenz in view of Dyches.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellant regarding the above-noted rejections, we make reference to the answer (mailed February 17, 2004) for the examiner's complete reasoning in support of the rejections, and to the brief (filed December 31, 2003) and reply brief (filed April 19, 2004) for the appellant's arguments thereagainst.

Only those arguments actually made by appellant have been considered in this decision. Arguments which appellant could have made but chose not to make in the brief have not been considered. See 37 CFR § 41.37(c)(1)(vii)(eff. Sept. 13, 2004).

#### OPINION

In reaching our decision in this appeal, we have carefully considered the subject matter on appeal, the rejections advanced by the examiner, and the evidence of anticipation and obviousness relied upon by the examiner as support for the rejections. We have, likewise, reviewed and taken into consideration, in

reaching our decision, appellant's arguments set forth in the briefs along with the examiner's rationale in support of the rejections and arguments in rebuttal set forth in the examiner's answer. Upon consideration of the record before us, we make the determinations which follow.

We begin with the rejection of claims 1, 2, 6 and 7 under 35 U.S.C. § 102(e) as being anticipated by Bolenz. We turn first to claim 1. To anticipate a claim, a prior art reference must disclose every limitation of the claimed invention, either explicitly or inherently. In re Schreiber, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997). As stated in In re Oelrich, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981) (quoting Hansqirg v. Kemmer, 102 F.2d 212, 214, 40 USPQ 665, 667 (CCPA 1939)) (internal citations omitted):

Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient. If, however, the disclosure is sufficient to show that the natural result flowing from the operation as taught would result in the performance of the questioned function, it seems to be well settled that the disclosure should be regarded as sufficient.

The examiner's position (answer, page 3) is that:

Operation inherently requires that starter 37 first be actuated to engage the pinion, since this is how such a conventional starter operates, with starter/generator 14 then being actuated. The

inherent function of starter/generator 14 is, by definition, to operate in generator mode after starter operation is completed. This operation is sufficient to anticipate starting actuation function as broadly specified by claim 1 and 6.

Appellant asserts (brief, page 6) that Bolenz fails to disclose management means which drive the main electrical machine and the starter according to a particular sequence, and that Bloenz also fails to disclose "the management means include means for cutting off the operation of the main electrical machine in motor mode when a condition for activation of the supplemental starter is detected. It is further argued (brief, page 7) that "[n]otably, the electrical machine is not cut off when at least one condition for activation of the supplemental starter is detected - as claimed."

The examiner responds (answer, page 5) by asserting "[t]he function of 'cutting off the operation of the main electrical machine in motor mode' is performed when only the starter 37 is used for starting. The claims do not require that the main electrical machine and supplementary starter be separately energized to apply starting rotation to the engine sequentially in a particular pattern."

Appellant asserts in the reply brief (page 2) that "the examiner's allegations that the operation of ... Bolenz inherently requires that starter 37 first be actuated is in error" because "Bolenz clearly discloses on column 4, lines 25-28 that 'at higher temperatures of the internal combustion engine over 40°C. the starting functions are performed exclusively by the substantially wear-free starter/generator device 24.'"

With respect to the examiner's allegation that control device 36 of Bolenz must inherently provide a control sequence of energizing and deenergizing the starter 37 and/or the starter/generator device 33, appellant asserts (id.) that as disclosed by Bolenz, either the conventional starter, or the starter/generator, or both are activated, but not according to a particular sequence. Appellant further asserts (reply brief, page 3) that "[c]laim 1 recites that 'the management means include means for cutting off the operation of the main electrical machine in motor mode when a condition for activation of the supplementary starter is detected (emphasis added), not simply cutting off the operation of the main electrical machine in motor mode, as erroneously alleged by the Examiner."

From our review of Bolenz we find that in the event of a cold internal combustion engine, the conventional starter and the

starter/generator together perform the starting function (col. 2, lines 21-24). Bolenz further discloses that for temperatures over 30/40° C., the starting function is performed by the starter/generator alone (col. 2, lines 31-33). In describing cold temperature starts, Bolenz discloses that for starts with temperatures below 30-40°C., the inertia-wheel machine (24) provides approximately half of the dragging moment of the conventional starter, and that the conventional starter takes over the other half in the case of the cold start. In this way the structural dimensions of both the conventional starter and the inertia-wheel device over the starter/generator device are substantially reduced (col. 4, lines 22-42).

We find from this disclosure that when a cold start of the engine is necessary, that both the starter/generator and the conventional starter each provide half the dragging moment necessary for starting the engine, such that the dimensions of both the conventional starter and the starter/generator can be substantially reduced.

Although Bolenz uses the phrase "takes over" we interpret the passage, taken with the passages stating that the conventional starter and the starter/generator work together to mean that each provides half of the force necessary to start the

engine when it is cold. We find no disclosure in the reference that the starter and the starter/generator operate in a sequence. However, even if the starter and the starter/generator do in fact work in sequence, claim 1 would still not be met because Bolenz does not disclose that the operation of the starter/generator is cut off when a condition for activation of the conventional starter is detected. That is, when the conventional starter takes over for the starter/generator in providing the other half of the dragging moment needed to start the engine, there is no disclosure that a need for activating the conventional starter is detected or that the starter/generator is cut off, as required by claim 1.

From the disclosure of Bolenz that at temperatures above 30-40°C., only the starter/generator is used to start the engine, we do not agree with the examiner (answer, page 3) that the operation inherently requires the conventional starter 37 to be actuated first. Nor do we agree with the examiner (answer, page 5) that the function of cutting off the operation of the main electrical machine [starter/generator] in motor mode is performed only when the starter is used for starting, because of the disclosure of Bolenz (col. 4, lines 25-28) that "[a]t high temperatures of the internal combustion engine, the starting



function is performed exclusively by the substantially wear-free starter/generator machine 33."

From all of the above, we find that the examiner has failed to establish a prima facie case of anticipation of claim 1 by Bolenz. The rejection of claim 1 under 35 U.S.C. § 102(e) is reversed. As independent claim 6 also requires that "the operation of the main electrical machine in motor mode is cut off when at least one condition for activation of the supplementary starter is detected", we cannot sustain the rejection of independent claim 6, along with dependent claims 2 and 7. The rejection of claims 2, 6 and 7 under 35 U.S.C. § 102(e) is reversed.

We turn next to the rejection of claims 3, 8 and 11 under 35 U.S.C. § 103(a) as being unpatentable over Bolenz in view of Dyches. We cannot sustain the rejection of claims 3, 8 and 11 because Dyches fails to make up for the basic deficiencies of Bolenz. The rejection of claims 3, 8 and 11 under 35 U.S.C. § 103(a) is reversed.

To summarize, the decision of the examiner to reject claims 1, 2, 6 and 7 under 35 U.S.C. § 102(e) is reversed. The decision of the examiner to reject claims 3, 8 and 11 under 35 U.S.C. § 103(a) is reversed.

MURRIEL E. CRAWFORD  
Administrative Patent Judge

STUART S. LEVY  
Administrative Patent Judge

ROBERT E. NAPPI  
Administrative Patent Judge

BOARD OF PATENT  
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